

REMARKS

Claims 1-44 have been previously cancelled. Claims 45-65 were previously presented in the present application. As indicated above, claims 47, 55 and 63 are cancelled. Claims 45, 46, 48, 53, 54, 56, 61, 62 and 64 are amended.

Reconsideration of the application is requested in view of the remarks that follow.

Claims 45-65 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sato et al. (US 5,766,360) in view of Toprac et al. (US 6,304,999) and the acknowledged prior art of the instant specification.

Independent claims 45, 53 and 61, as amended above, recite the integration of a scatterometry instrument into an existing multi-station wafer processing tool, the scatterometry instrument being sized to fit within one of the station slots of the processing tool and accessible to a wafer handler for the processing tool. As recited in the claims, the scatterometry instrument can inspect a wafer after any step in the process and, in particular, alter process flow, i.e. the sequence of process steps in which the wafer is subsequently processed, such as by sending a wafer back to a station for further processing. This can be done without losing the precision of a stand-alone scatterometry-based measurement system.

The primary reference cited by the Examiner, the Sato et al. reference, discloses the utilization of a wafer inspection station in a process tool that also includes wafer processing stations. According to the Sato et al. disclosure, after inspection of a wafer in the inspection station, process parameters may be altered in the further processing of the wafer in the tool. Upon review of the Sato et al. disclosure, Applicant submits that it does not appear that Sato et al. either teach or suggest alteration of process flow within the tool, that is, the sequence of steps by which a wafer is processed in the tool, as claimed by Applicant.

The Examiner also cites the Toprac et al. reference for its teaching of a scatterometry instrument for inspecting and controlling the processing of wafers. However, upon review of the Toprac et. al. reference, Applicant submits that the reference does not disclose the inclusion of a

scatterometry station in a multi-station tool for controlling the process flow of a wafer within the tool.

The Sun reference is cited for its discussion of the benefits of having an inspection tool included in a cluster tool, but does not disclose alteration of process flow within the tool based upon the inspection within the tool, as claimed by Applicants.

Thus, Applicant submits that the references cited by the Examiner, whether considered individually or in combination, neither teach nor suggest the invention recited in Applicant's amended independent claims 45, 53 and 61, or in claims depending therefrom.

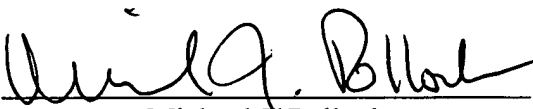
In view of the above, it is submitted that the application is now in condition for allowance.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-1703, under Order No. TTI-31000. **A duplicate copy of the transmittal cover sheet attached to this Response to Office Action Mailed November 10, 2005, is provided herewith.**

Respectfully submitted,

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